

Abstract**Process for preparing metallocenes**

The present invention relates to a process for preparing a metallocene, which comprises reacting a ligand starting compound with an adduct of the formula 5 (I),



where M^1 is a metal of group III, IV, V or VI of the Periodic Table of the Elements or an element of the 10 lanthanide or actinide series, preferably titanium, zirconium or hafnium, particularly preferably zirconium,

X are identical or different and are each halogen, C_1-C_{10} -alkoxy, C_6-C_{10} -aryloxy, C_1-C_{10} -alkylsulfonate such as 15 mesylate, triflate, nonaflate, C_6-C_{10} -arylsulfonate such as tosylate, benzenesulfonate, C_1-C_{10} -alkylcarboxylate such as acetate, formate, oxalate or 1,3-dicarbonylate such as acetylacetone or fluorinated 1,3-dicarbonylate, in particular chlorine, bromine, 20 particularly preferably chlorine,

n is an integer and is 2,3,4,5 or 6 and corresponds to the oxidation number of the metal M^1 ,

a is an integer or fraction and $0 < a \leq 4$ and a is 25 preferably in the range from 0.5 to 2.5 and is in particular 1, 1.5 or 2,

and D is a linear, cyclic or branched oligoether or polyether containing at least two oxygen atoms or an oligothioether or polythioether containing at least two sulfur atoms.